

ABSTRACT OF THE DISCLOSURE

The invention includes semiconductor processing methods, including methods of forming capacitors. In one implementation, a semiconductor processing method includes providing a semiconductor substrate comprising a layer comprising at least one metal in elemental or metal alloy form. The metal comprises an element selected from the group consisting of platinum, ruthenium, rhodium, palladium, iridium, and mixtures thereof. At least a portion of the layer is etched in a halogenide, ozone and H₂O comprising ambient.